

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-21 (Canceled).

Claim 22 (New): A microstructure comprising:

in a first layer insulated from a substrate by an insulator layer at least one sensitive element connected to at least one contact pad by an electrical connection and protected by a package cap,

wherein the at least one sensitive element, the electrical connection, and the at least one contact pad form an assembly delimited in the first layer by at least one trench, the assembly being covered by the package cap,

wherein the package cap comprises at least one opening above the at least one contact pad and being integral with the at least one contact pad on edges of the at least one opening and a zone located beyond the at least one trench in relation to the assembly.

Claim 23 (New): A microstructure according to claim 22, wherein the package cap is sealed in a leak tight manner to define a leak tight cavity in which the at least one sensitive element is located.

Claim 24 (New): A microstructure according to claim 23, wherein the package cap further comprises at least one orifice configured to be being sealed by a plug to control atmosphere of the cavity.

Claim 25 (New): A microstructure according to claim 22, wherein the electrical connection, the at least one contact pad, and the at least one sensitive element are formed in a same material.

Claim 26 (New): A microstructure according to claim 22, wherein the package cap is formed in a dielectric material.

Claim 27 (New): A microstructure according to claim 22, wherein the package cap is formed in a semi-conductor or conductor material.

Claim 28 (New): A microstructure according to claim 27, wherein the assembly and the package cap are formed in a same conductor or semi-conductor material.

Claim 29 (New): A microstructure according to claim 27, wherein a dielectric layer insulates the package cap from the at least one contact pad.

Claim 30 (New): A microstructure according to claim 27, wherein a dielectric layer insulates the package cap from the zone.

Claim 31 (New): A microstructure according to claim 22, wherein the at least one contact pad is covered with a conductive band at a level of the at least one opening.

Claim 32 (New): A microstructure according to claim 22, wherein the package cap further comprises at least one pillar resting on a zone of the at least one sensitive element.

Claim 33 (New): A microstructure according to claim 32, wherein the zone of the at least one sensitive element is integral with the substrate.

Claim 34 (New): A microstructure according to claim 32, wherein the package cap is formed in a conductor or semi-conductor material, and comprises at least one pillar resting on a zone of the at least one sensitive element, the package cap and the at least one pillar contributing to forming an electrical connection with the zone.

Claim 35 (New): A microstructure according to claim 32, wherein the package cap is formed in a conductor or semi-conductor material, and the at least one pillar is electrically insulated from the at least one sensitive element.

Claim 36 (New): A method of manufacturing a microstructure including on a substrate at least one sensitive element connected to at least one contact pad by an electrical connection, the method comprising:

forming on the substrate a first layer configured to form the at least one sensitive element, the electrical connection, and the at least one contact pad;

etching the first layer at contours of the at least one sensitive element, the electrical connection, and the at least one contact pad to form an assembly delimited by at least one trench;

forming above the first etched layer a sacrificial layer and shaping to form an impression of a package cap to be deposited subsequently;

forming on the impression a second layer configured to form the package cap and shaping of the second layer by etching at least one opening above the at least one contact pad, at least one orifice through which is eliminated the sacrificial layer, making the package cap

integral with the at least one contact pad on edges of the at least one opening and a zone located beyond the trench in relation to the assembly.

Claim 37 (New): A method according to claim 36, wherein the elimination of the sacrificial layer frees a leak tight cavity defined by the package cap, and comprises forming a plug in the orifice after controlling atmosphere found in the cavity.

Claim 38 (New): A method according to claim 36, further comprising, before the etching the first layer, depositing a dielectric layer on the at least one contact pad to insulate the package cap from the at least one contact pad around the at least one opening when the package cap is formed in a conductor or semi-conductor material.

Claim 39 (New): A method according to claim 36, further comprising, before the etching of the first layer, depositing a dielectric layer on the zone to insulate the package cap from the zone when the package cap is formed in a conductor or semi-conductor material.

Claim 40 (New): A method according to claim 36, further comprising depositing a conductor material at a summit of the at least one contact pad at a level of the at least one opening.

Claim 41 (New): A method according to claim 36, wherein the shaping the sacrificial layer provides for etching of at least one sink configured to form a mold for a pillar of the package cap connecting it to the at least one sensitive element.

Claim 42 (New): A method according to claim 39, wherein the package cap comprises at least one pillar resting on a zone of the at least one sensitive element and the package cap is a conductor or semi-conductor, and the dielectric layer is also deposited at a level of the zone of the at least one sensitive element.